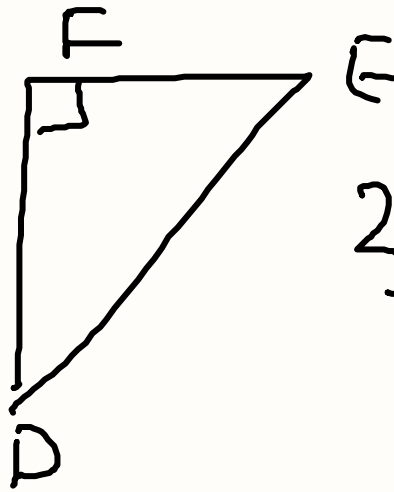
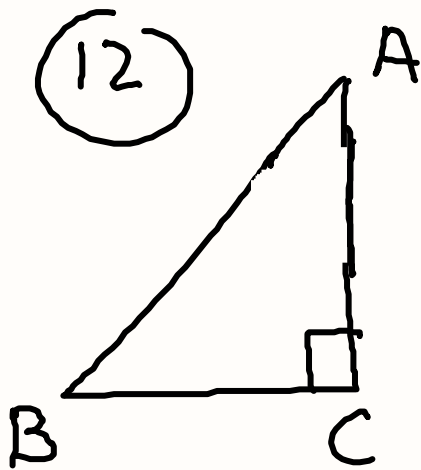


# GEOM. PART 3

(12)



$$m\angle A = 35^\circ$$

$$BC = 2x + 3$$

$$m\angle D = 35^\circ$$

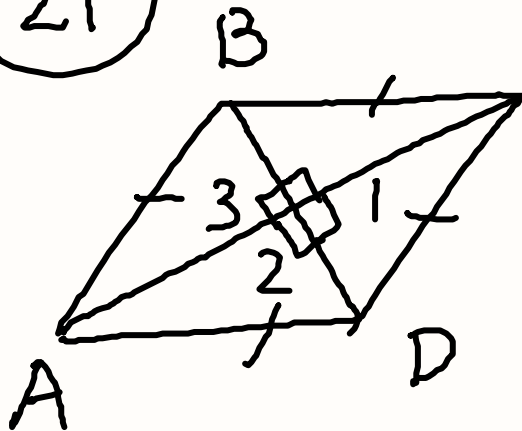
$$EF = x + 5$$

$$\begin{array}{r} 2x + 3 = x + 5 \\ -x \quad -x \end{array}$$

$$\begin{array}{r} x + 3 = 5 \\ -3 \quad -3 \end{array}$$

$$\underline{x = 2}$$

(21)



$$20x = 90$$

$$x = 4.5$$

$$60z = 90$$

$$z = \frac{3}{2}$$

$$m\angle 1 = (20x)^\circ$$

$$m\angle 2 = (2x + 2y)^\circ$$

$$m\angle 3 = (60z)^\circ$$

$$20x + 2x + 2y = 180$$

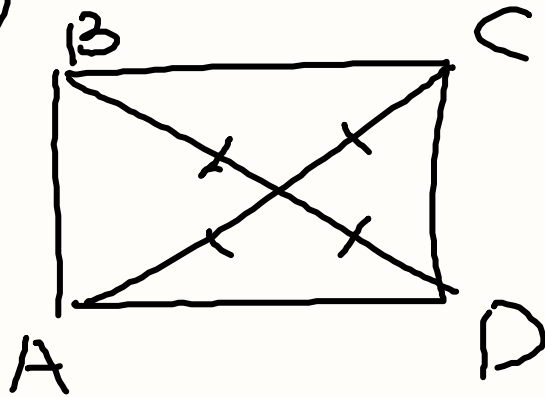
$$\underline{10x + x + y = 90}$$

$$11x + y = 90$$

$$y = 90 - 11x$$

$$y = 90 - 11 \cdot 4.5 = 40.5$$

22



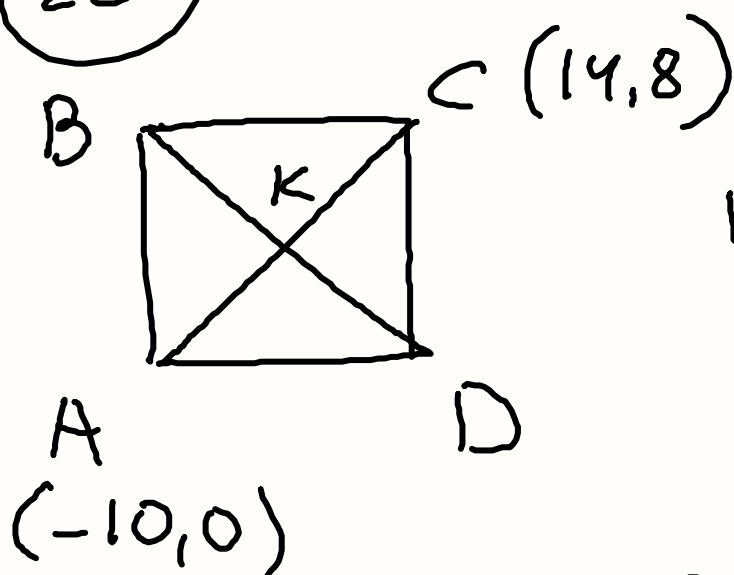
$$X_m = \frac{X_A + X_C}{2}$$

$$X_m = \frac{-4 + 18}{2} = 7$$

$$y_m = \frac{y_A + y_C}{2}$$

$$y_m = \frac{8 + (-12)}{2} = -\frac{4}{2} = -2$$

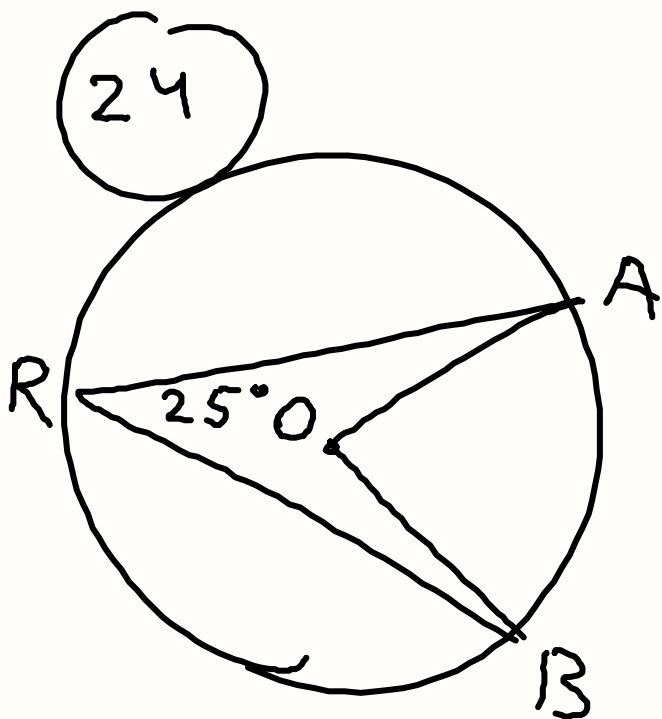
(23)



$$m_1 = \frac{y_2 - y_1}{x_2 - x_1} =$$

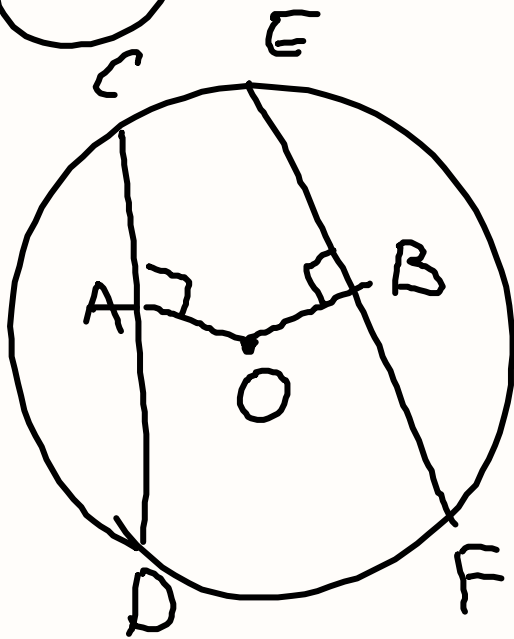
$$= \frac{8 - 0}{14 - (-10)} = \frac{8}{24} = \frac{1}{3}$$

$$m_2 = -3$$



$$m \angle AOB = 2 \cdot 25^\circ = 50^\circ$$

(25)

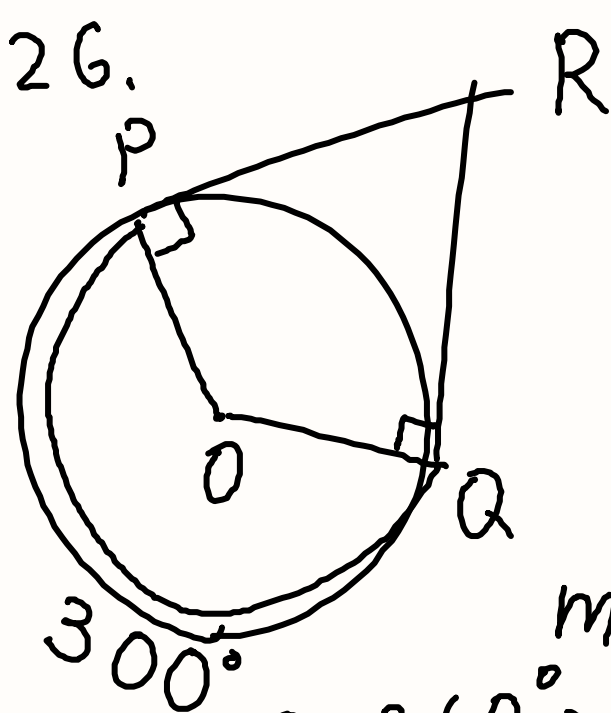


$$CD = EF$$

$$AO = 5 \text{ m}$$

$$OB = ?$$

$$OB = 5 \text{ m}$$



$m\angle R - ?$

PR, QR

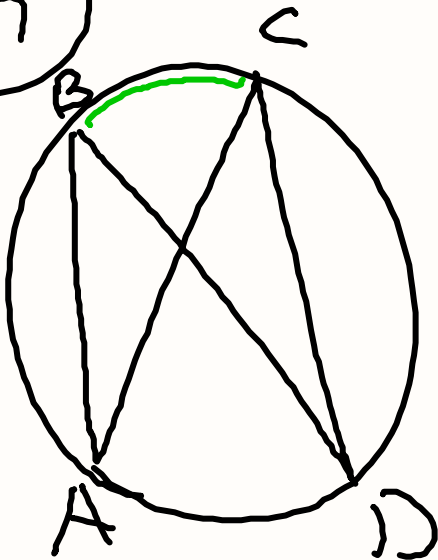
- TANGENTS

$$\widehat{PQ} = 360^\circ - 300^\circ = 60^\circ$$

$$m\angle POQ = 60^\circ$$

$$m\angle R = 360^\circ - (90^\circ + 90^\circ + 60^\circ) = 360^\circ - 240^\circ = 120^\circ$$

27



$$\begin{aligned}
 &y - ? \\
 m\angle BAC &= \\
 &= 4.45 - 10 = \\
 &= 170^\circ
 \end{aligned}$$

$$\begin{aligned}
 m\angle BAC &= \\
 &= (4y - 10)^\circ
 \end{aligned}$$

$$\begin{aligned}
 m\angle BDC &= \\
 &= (2y + 80)^\circ
 \end{aligned}$$

$$\begin{array}{r}
 4y - 10 = 2y + 80 \\
 \underline{-2y} \quad \quad \underline{-2y} \\
 2y - 10 = 80
 \end{array}$$

$$\begin{array}{r}
 2y - 10 = 80 \\
 \underline{+10} \quad \underline{+10} \\
 2y = 90 \\
 y = 45
 \end{array}$$



(28)

$$D=10 \quad C=?$$

$$C=2\pi R$$

$$C=\pi D = 3.14 \cdot 10 = \\ = 31.4$$

(29)

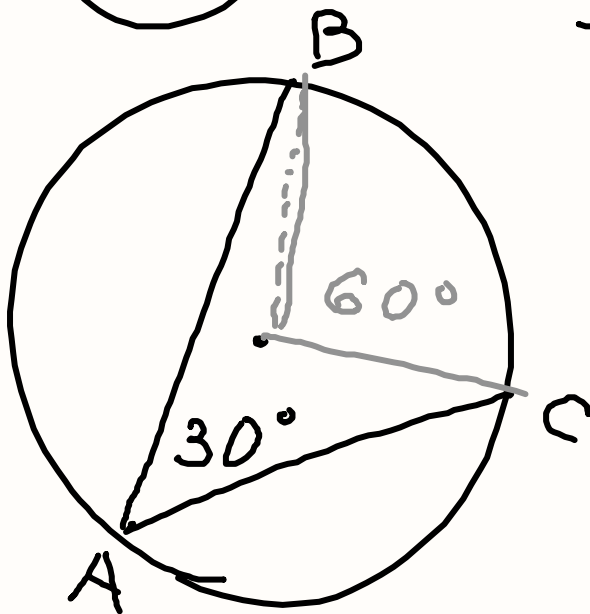
$$C = 100\text{m}$$

$$D = ?$$

$$C = \pi D$$

$$D = \frac{C}{\pi} = \frac{100}{3.14} \approx 31.8\text{m}$$

(30)



$$R = 10\text{ m}$$

Length of  $\widehat{BC}$

$$C = 2\pi R =$$
$$= 2 \cdot 3.14 \cdot 10 = 62.8$$

$$\frac{62.8}{X} = \frac{360^\circ}{60^\circ}$$

$$360X = 62.8 \cdot 60$$

$$X = \frac{62.8 \cdot 60}{360} \approx \frac{62.8}{6} \approx 10.4\text{ m}$$